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OCA PAD INITIATION - PROJECT HEADER INFORMATION

10/13/87

Active

Project #: G-33-668
Center # : R6361-OAO

Cost share #: G-33-329
Center shr #: F6361-OAO

Rev #: 0
OCA file #:
Work type : RES
Document : GRANT
Contract entity: GTRC

Contract#: BBS-8610745
Prime #:

Mod #:

Subprojects ? : N
Main project #:

Project unit: CHEM
Project director(s):
SUDDATH F L JR CHEM

Unit code: 02.010.136

Sponsor/division names: NATL SCIENCE FOUNDATION / GENERAL
Sponsor/division codes: 107 / 000

Award period: 870615 to 900228 (performance) 900531 (reports)

	Sponsor amount	New this change	Total to date
Contract value		193,800.00	193,800.00
Funded		193,800.00	193,800.00
Cost sharing amount			185,000.00

Does subcontracting plan apply ?: N

Title: AREA DETECTOR-ROTATING ANODE DATA COLLECTION SYSTEM

PROJECT ADMINISTRATION DATA

OCA contact: John B. Schonk 894-4820

Sponsor technical contact

Sponsor issuing office

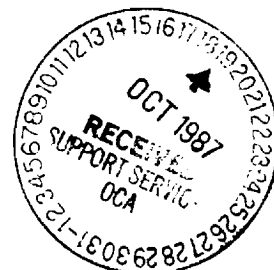
JOHN WOOLEY
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BBS/DMB
WASHINGTON, DC 20550

MARY ANN MESSIER
(202)357-9653
NATIONAL SCIENCE FOUNDATION
DGC/BBS
WASHINGTON, DC 20550

Security class (U,C,S,TS) : U
Defense priority rating :
Equipment title vests with: Sponsor

ONR resident rep. is ACO (Y/N): N
NSF supplemental sheet
GIT X

Administrative comments -
PROJECT INITIATION



GEORGIA INSTITUTE OF TECHNOLOGY
OFFICE OF CONTRACT ADMINISTRATION

NOTICE OF PROJECT CLOSEOUT

Closeout Notice Date 08/26/91

Project No. G-33-668_____ Center No. R6361-0A0_____

Project Director SUDDATH F L JR_____ School/Lab CHEMISTRY_____

Sponsor NATL SCIENCE FOUNDATION/GENERAL_____

Contract/Grant No. DIR-8610745_____ Contract Entity GTRC

Prime Contract No. _____

Title AREA DETECTOR-ROTATING ANODE DATA COLLECTION SYSTEM_____

Effective Completion Date 910228 (Performance) 910531 (Reports)

Closeout Actions Required:	Y/N	Date Submitted
Final Invoice or Copy of Final Invoice	N	_____
Final Report of Inventions and/or Subcontracts	Y	910821
Government Property Inventory & Related Certificate	N	_____
Classified Material Certificate	N	_____
Release and Assignment	N	_____
Other _____	N	_____

Comments BILLING VIA LINE-OF-CREDIT. 98A SATISFIES REQUIREMENT FOR PATENT
REPORTING. _____

Subproject Under Main Project No. _____

Continues Project No. _____

Distribution Required:

Project Director	Y
Administrative Network Representative	Y
GTRI Accounting/Grants and Contracts	Y
Procurement/Supply Services	Y
Research Property Management	Y
Research Security Services	N
Reports Coordinator (OCA)	Y
GTRC	Y
Project File	Y
Other _____	N
_____	N

NOTE: ✓ Final Patent Questionnaire sent to PDPI. 98A

FINAL PROJECT REPORT
NSF FORM 98A

PLEASE READ INSTRUCTIONS ON REVERSE BEFORE COMPLETING

PART I-PROJECT IDENTIFICATION INFORMATION

1. Institution and Address Georgia Institute of Technology OCA	2. NSF Program IID	3. NSF Award Number DIR-8610745
	4. Award Period From 6/15/87 To 2/28/91	5. Cumulative Award Amount \$ 210,600.00

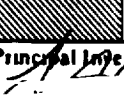
6. Project Title

Area Detector - Rotating Anode Data Collection System

PART II-SUMMARY OF COMPLETED PROJECT (FOR PUBLIC USE)

A facility, including state-of-the-art instrumentation, has been built in the School of Chemistry and Biochemistry at Georgia Tech to collect and process high resolution x-ray diffraction data from crystal of macromolecules. This facility consists of a Rigaku RU 200 high intensity x-ray generator, a single San Diego Multiwire System area detector, a Huber four circle crystal positioning system, associate electronics and computing system. The installation of this system accomplishes the primary objective of the funded project. The system has been used by faculty, postdoctoral fellows, and graduate students to collect high quality diffraction data used in solving the molecular structure of human serum transferrin, trypsin-inhibitor complexes and carbohydrate binding proteins. It is the only system capable of collecting high resolution data from protein and nucleic acid crystals in the the State of Georgia.

PART III-TECHNICAL INFORMATION (FOR PROGRAM MANAGEMENT USES)

1. ITEM (Check appropriate blocks)	NONE	ATTACHED	PREVIOUSLY FURNISHED	TO BE FURNISHED SEPARATELY TO PROGRAM	
				Check (✓)	Approx. Date
a. Abstracts of Theses	x to date				
b. Publication Citations		x			
c. Data on Scientific Collaborators		x			
d. Information on Inventions	x				
e. Technical Description of Project and Results					
f. Other (specify)					
2. Principal Investigator/Project Director Name (Typed) F. L. Suddath	3. Principal Investigator/Project Director Signature 			4. Date 7/23/91	

Part III.

1b.

Prasthofer, Thomas., Phillips, Susan R., Suddath, F.L., and Engler, Jeffrey A., Design, Expression and Crystallization of Recombinant Lectin from the Garden Pea (*Pisum sativum*). *J. Biol. Chem.* April, **264**, 6793-6796, (1989).

Basu, Debkumar, Delucas, Lawrence, Parks, Elizabeth H., Suddath, F.L., Preliminary Crystallographic Study of the α -D-Galactose-specific Lectin from Jack Fruit (*Artocarpus Integra*) Seeds. *J. Mol. Biol.* **201**, 661-662, (1988).

Einspahr, Howard, Parks, Elizabeth H., Phillips, Susan R., and Suddath, F.L. (1988) Crystal Structure Studies of Legume Lectins. *Lectins in Biology, Biochemistry, Clinical Biochemistry Vol 6*, pp 245-263, Ed. T.C.Bøg-Hansen and D.L.J. Freed, Sigma Chemical Co., St. Louis, MO.

Part III.

1c.

Jeffrey Engler, Professor, UAB Medical Center, Birmingham AL.

Howard Ennsphahr, Scientist, Upjohn Co., Kalamazo, MI.

Susan Phillips, postdoctoral fellow

Harmon Zuccola, graduate student

Jay Bertrand, graduate student

Gretchen Meinke, graduate student

Thomas Prasthofer, graduate student

Mi Li, graduate student

PART IV - SUMMARY DATA ON PROJECT PERSONNEL

NSF Division _____

The data requested below will be used to develop a statistical profile on the personnel supported through NSF grants. The information on this part is solicited under the authority of the National Science Foundation Act of 1950, as amended. All information provided will be treated as confidential and will be safeguarded in accordance with the provisions of the Privacy Act of 1974. NSF requires that a single copy of this part be submitted with each Final Project Report (NSF Form 98A); however, submission of the requested information is not mandatory and is not a precondition of future awards. If you do not wish to submit this information, please check this box ☐

Please enter the numbers of individuals supported under this NSF grant.
Do not enter information for individuals working less than 40 hours in any calendar year.

*U.S. Citizens/ Permanent Visa	PI's/PD's		Post- doctorals		Graduate Students		Under- graduates		Precollege Teachers		Others	
	Male	Fem.	Male	Fem.	Male	Fem.	Male	Fem.	Male	Fem.	Male	Fem.
American Indian or Alaskan Native												
Asian or Pacific Islander					1							
Black, Not of Hispanic Origin						1						
Hispanic												
White, Not of Hispanic Origin	1		1	1	3	1	3	2				
Total U.S. Citizens	1		1	1	3	2	3	2				
Non U.S. Citizens	0		0	0	1	0	0	0				
Total U.S. & Non- U.S. . .	1		1	1	4	2	3	2				
Number of individuals who have a handicap that limits a major life activity.	0		1	0	0	0	0	0				

*Use the category that best describes person's ethnic/racial status. (If more than one category applies, use the one category that most closely reflects the person's recognition in the community.)

AMERICAN INDIAN OR ALASKAN NATIVE: A person having origins in any of the original peoples of North America, and who maintains cultural identification through tribal affiliation or community recognition.

ASIAN OR PACIFIC ISLANDER: A person having origins in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands. This area includes, for example, China, India, Japan, Korea, the Philippine Islands and Samoa.

BLACK, NOT OF HISPANIC ORIGIN: A person having origins in any of the black racial groups of Africa.

HISPANIC: A person of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish culture or origin, regardless of race.

WHITE, NOT OF HISPANIC ORIGIN: A person having origins in any of the original peoples of Europe, North Africa or the Middle East.

THIS PART WILL BE PHYSICALLY SEPARATED FROM THE FINAL PROJECT REPORT AND USED AS A COMPUTER SOURCE DOCUMENT. DO NOT DUPLICATE IT ON THE REVERSE OF ANY OTHER PART OF THE FINAL REPORT.